

Application No. 10/672,269  
Amendment dated 1/17/2006  
Final Rejection dated 12/22/05

Docket No.: 83217US1

**AMENDMENTS TO THE CLAIMS**

Claims 1-8 and 14-16 are canceled.

17. (New) An ion-ion plasma source comprising:
- a processing chamber;
  - an electron source operable to provide an electron beam in said processing chamber; and
  - an electron beam confiner operable to generate a magnetic field at said electron beam thereby maintaining a current density of said electron beam at approximately  $0.1 \text{ A/cm}^2$ .
18. (New) The ion-ion plasma source of claim 17, wherein said processing chamber is operable to maintain a gas pressure of approximately 50 mtorr.
19. (New) An ion-ion plasma source, comprising:
- a processing chamber;
  - an electron source operable to provide an electron beam in said processing chamber; and
  - an electron beam confiner operable to generate a magnetic field at approximately 200 G, the magnetic field is applied to said electron beam thereby maintaining said electron beam at approximately 1 meter.